

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently amended): A process for communication between subscriber stations via a packet switching network, said process comprising

evaluating deterministic behavior of a the packet switching network including subscriber stations connected to each other through at least one switch, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches the a destination subscriber station(s) station within a duration that is limited in time, the process said evaluating comprising:

determining a max latency value, the max latency value being a maximum residence time in an output buffer of a switch,

determining a BAG_i value, the BAG_i value being a minimum time between two consecutive frames belonging to a virtual link i, before they are transmitted,

determining a (Jitter In)_i value, wherein the (Jitter In)_i is jitter associated with a virtual link i that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant,

determining a (max frame duration)_i value, the (max frame duration)_i value being a duration of a longest frame on the virtual link i, and

determining for each output port from each switch on the network if the following relation is satisfied:

$$\begin{aligned} & i \text{ number of virtual links} \\ & \text{passing through the buffer} \end{aligned} \quad \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * \\ & (\text{max frame duration}) \leq \text{latency}$$

in which:

~~the max latency value is a maximum residence time in an output buffer of a switch, this value may be different for each switch in the network,~~

~~BAG_i is a minimum time between two consecutive frames belonging to a virtual link i, before they are transmitted,~~

~~(Jitter In)_i is Jitter associated with a virtual link i that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant, and~~

~~(max frame duration)_i is a duration of a longest frame on the virtual link i.~~

Claim 2 (Currently Amended): A process according to claim 1, ~~in which~~ further comprising adding the virtual links are added one by one, and the determining of each output port is performed after each addition of a virtual link.

Claim 3 (Original): A process according to claim 1, wherein the packet switching network is located on an aircraft.

Claim 4 (Original): A process according to claim 3, wherein the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen.

Claim 5 (Original): A process according to claim 4, wherein the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer.

Claim 6 (Original): A process according to claim 5, wherein the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters.

Claim 7 (Currently amended): A system for communication between subscriber stations via a packet switching network, said system comprising

evaluating deterministic behavior of a the packet switching network ~~including subscriber stations connected to each other through at least one switch~~, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches ~~the~~ a destination subscriber station(s) station within a duration that is limited in time, the system comprising:

a control to determine for each output port from each switch on the network if the following relation is satisfied:

$$i \text{ number of virtual links passing through the buffer} \quad \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration}) \leq \text{latency}$$

in which:

the max latency value is a maximum residence time in an output buffer of a switch,
~~this value may be different for each switch in the network,~~

BAG_i is a minimum time between two consecutive frames belonging to a virtual link
i, before they are transmitted,

(Jitter In)_i is ~~Jitter~~ jitter associated with a virtual link i that represents a time interval
between a theoretical instant at which a frame is transmitted, and its effective transmission
that may be before or after the theoretical instant, and

(max frame duration)_i is a duration of a longest frame on the virtual link i.

Claim 8 (Original): A system according to claim 7, in which the virtual links are
added one by one, and the determining is performed after each addition of a virtual link.

Claim 9 (Original): A system according to claim 7, wherein the packet switching
network is located on an aircraft.

Claim 10 (Original): A system according to claim 9, wherein the packet switching
network includes a first switch connected to a first graphic screen and a second graphic
screen.

Claim 11 (Original): A system according to claim 10, wherein the packet switching
network includes a second switch connected to a flight parameters generator and an aircraft
maintenance computer.

Claim 12 (Original): A system according to claim 11, wherein the first graphic screen
displays flight parameters and the second graphic screen displays flight and maintenance
parameters.

Claim 13 (New): A process according to claim 1, wherein the jitter refers to max
jitter.

Claim 14 (New): A process according to claim 1, further comprising the step of
aggregating a number of the virtual links without causing any loss of segregation.

Claim 15 (New): A process for communication between subscriber stations via a frame switching network, said process comprising

evaluating deterministic behavior of the packet switching network, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches a destination subscriber station within a duration that is limited in time, said evaluating comprising:

determining a max latency value, the max latency value being a maximum residence time in an output buffer of a switch,

determining a BAG_i value, the BAG_i value being a minimum time between two consecutive frames belonging to a virtual link *i*, before they are transmitted,

determining a (Jitter In)_{*i*} value, wherein the (Jitter In)_{*i*} is jitter associated with a virtual link *i* that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant,

determining a (max frame duration)_{*i*} value, the (max frame duration)_{*i*} value being a duration of a longest frame on the virtual link *i*, and

determining for each output port from each switch on the network if the following relation is satisfied:

$$\left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration}) \leq \text{latency}$$

i number of virtual links
passing through the buffer

Claim 16 (New): A process according to claim 15, further comprising adding the virtual links one by one, and wherein the determining of each output port is performed after each addition of a virtual link.

Claim 17 (New): A process according to claim 15, wherein the packet switching network is located on an aircraft.

Claim 18 (New): A process according to claim 17, wherein the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen.

Claim 19 (New): A process according to claim 18, wherein the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer.

Claim 20 (New): A process according to claim 19, wherein the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters.